

## REMARKS

### **I. Amendments to the Claims**

Applicants respectfully request that the Amendment be entered. Upon entry of the foregoing amendment, claims 1-3, 6-21, and 24-72 will be pending. Claims 1-3, 6-21, and 24-72 stand rejected. Claims 10, 11, 13, 24-28, 30, 32, 40, 42, 45-51, 54, 58-62, 65-67, 69 and 70 are amended.

Applicant respectfully requests entry of the above amendment and submits that the amendment does not introduce new matter. Support for the amendment to the claims and for the new claims can be found throughout the specification (considered as a whole) and in the claims as originally filed. Claims 10, 11, 13, 24-26, 42, 45, 46, 49-51, 54, 58-62, 66, and 70 were amended to correct antecedent basis. Claims 28, 30, 46, 65 and 67 were amended to incorporate the proper claim transition “comprise.” Claim 27 was amended for clarification. Claims 32, 40, 47, and 48 were amended to correct typographical errors. Support for further amendment to claims 60-62 and 70 can be found, *inter alia*, in the specification at page 19, line 22 to page 20, line 2. Support for the amendment to claim 69 can be found, *inter alia*, in the specification at page 21, lines 9-28 and page 22, lines 16-20.

Based on the above amendments and the remarks below, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

### **II. Claim Rejections**

Claims 1-3, 6-21, and 24-72 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Office Action, p. 2. Applicants respectfully traverse the rejection.

As indicated above, claims 11, 13, 24-27, 30, 42, 46, 49-51, 58-62, 65, and 66 have been amended. Therefore, the rejections are rendered moot. Applicants respectfully request that the rejections be withdrawn.

Claim 27, which depends from claim 18, claims that the one or more nutrient media comprise a specific molar ratio of silver:jasmonate. It is clear on the face of claim 27 that the ratio is based on the silver and jasmonate in the nutrient media, no matter how or when it was

added. Moreover, since claim 18 is an “open” claim and states that the ethylene-action antagonist may be a silver-containing compound, a silver complex or silver ion, the silver may be from a silver containing compound and a silver complex, for example. Therefore, no antecedent basis for silver *per se* is necessary, and the subject matter claimed would be well-recognized by one of ordinary skill in the art.

Claim 30 has been amended to clarify that, although claim 1 requires a minimum of one enhancement agent from any one of the three classes in the Markush group, claim 30 requires a minimum of two enhancement agents from two different classes of enhancement agents in the Markush group of claim 1. It should be noted that claim 1 recites a Markush group made up of three classes of compounds, but claim 30 recites the classes as optional subgroups, not a Markush group. In addition, claim 30 has antecedent basis for “jasmonic acid or an alkyl ester thereof” in claim 1 because it falls within “jasmonate-related compounds or alkyl esters thereof” as indicated in the specification at page 28, lines 16-25. Furthermore, since claim 64 depends from claim 30, the rejection of claim 64 is rendered moot, and Applicants respectfully request that the rejection be withdrawn.

The Office Action did not designate specific rejections of claims 2, 3, 6-10, 12, 14-21, 28, 29, 31-41, 43-45, 47, 48, 52-57, 63, 64, 67 and 71. Therefore, Applicants respectfully submit that these claims were allowable but merely depended from rejected claims. Because the claims from which they depend are in condition for allowance, they are also in condition for allowance.

The Office Action also asserted that claims 68-70 and 72 “are vague and indefinite in that the amount of polyamine respectively  $\beta$ -phenylalanine added to one or more nutrient media is not set forth with sufficient particularity.” In addition, page 3 of the Office Action asserts, “[I]t is unclear what is intended by ‘growth and product formation conditions.’”

Claim 69 has been amended to claim that polyamine is added to at least one of the one or more nutrient media in an amount sufficient to enhance taxane production, which is the same recitation as the amount of  $\beta$ -phenylalanine added in claim 72. A similar rejection of claim 72 was made in the final Office Action mailed December 19, 2001. In the Amendment Under 37 C.F.R. § 1.116 submitted in response on March 19, 2002, Applicants stated:

The specification describes and exemplifies detection of taxanes produced in cell cultures according to this invention, and it is a routine matter for the ordinary worker to titrate any component of the nutrient medium to determine the level of the component at which the

amount of taxane produced in a culture is enhanced over a control culture which does not contain the component. For the enhancing precursor material described on page 25, lines 26-27, the amount used to provide useful enhancement to taxane production will depend on the culture conditions as taught in the specification on page 21, lines 9-28, and the particular amount of  $\beta$ -phenylalanine for particular culture conditions may be determined by the skilled worker in view of the guidance in the specification. Claim 72 distinctly claims a method for producing taxanes in which  $\beta$ -phenylalanine is present in the culture in at least the amount determined by the ordinary worker in this manner. Therefore, this claim complies with the requirements of 35 U.S.C. § 112, second paragraph.

In a communication from the Examiner dated May 8, 2002, it was indicated that the claims were allowable but that prosecution had been suspended in view of a possible interference. Therefore, this rejection has been overcome previously, and the same reasoning applies to claim 69 as amended.

Finally, one of ordinary skill in the art would know what was intended by "growth and product formation conditions" as claimed in claims 68, 70, and 72. The specification clearly sets out the growth conditions for cultures derived from callus cultures (*see* pp. 13-14) and from suspension cultures (*see* pp. 14-16) and the conditions for taxol production (*see* pp. 16-20). Therefore, Applicants respectfully request that the rejections be withdrawn.

### **III. Statement**

A telephonic interview was held on May 12, 2006 between Examiner Irene Marx and Applicants' representative, Dr. Laurence H. Posorske. During the interview, Examiner Marx informed Dr. Posorske that an Office Action would be issued with rejections under 35 U.S.C. §112, second paragraph. Applicants thank Examiner Marx for her time in notifying Applicants' representative of the impending Office Action.